

State of Nevada
Department of Conservation and Natural Resources
Bureau of Mining Regulation and Reclamation
General Mining Bioremediation Facility Permit

AUTHORIZATION

In accordance with Nevada Revised Statutes (NRS) 445.223 "allowance for the issuance of a **General Permit**", the Nevada Division of Environmental Protection (Division) authorizes the permittee to construct, operate and close a Bioremediation Facility in accordance with the limitations, requirements and other conditions set forth in this permit.

The permittee must comply with all terms and conditions of this permit, and all applicable regulations.

This permit is based on the assumption that all the information provided by the permittee in the application is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for revocation of the permittee's authorization to operate a Bioremediation Facility. The permittee must inform the Division of any deviation from or changes in the information in the application which may affect the permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of April 19, 1995, and shall remain for the life of the mine, unless modified, suspended or revoked.

Signed this day of , 1995.

Daniel Tecca
Environmental Management Specialist
Bureau of Mining Regulation and Reclamation

1. Authorization.

This permit authorizes the permittee, in accordance with approved operating plans and facility designs, to:

- a. Construct, operate and close a Bioremediation Facility in accordance with those design plans;
- b. Contain within the system all applied enhancement solution as well as all meteoric waters which enter the system as a result of the 100-year, 24-hour storm event; and
- c. Actively treat and/or dispose of Permitted Material, as defined in Mining Sites Hydrocarbon Contaminated Soil Definitions and Guidelines (dated 4/5/95), introduced to the Bioremediation Facility.

2. Limitations.

The following events may be considered a permit violation:

- a. Introduction of a material other than a Permitted Material to the Bioremediation Facility;
- b. Removal from a cell of material with a TPH (Total Petroleum Hydrocarbons, Method 8015 Modified) value greater than 100 mg/kg; or
- c. Release of contaminants from the system that degrade waters of the state.

3. Monitoring.

A permittee is required to monitor the following items and keep records on site for the life of the mine:

- a. A monthly record of the total volume of hydrocarbon contaminated material added to the Bioremediation Facility as well as the locations where the material originated;
- b. A monthly record of the average temperature and precipitation;
- c. A monthly record of additives introduced to enhance bioremediation (e.g., water, nutrients, bacteria, etc.);

d. A monthly total (in cubic yards) of the hydrocarbon contaminated material contained within the Bioremediation Facility; and

e. A monthly record of the volume of material removed from the Bioremediation Facility.

4. Sampling and Analysis Requirements.

The Division has the right to obtain a reasonable number of random representative samples from the Bioremediation Facility for TPH (Method 8015) analysis. These samples will be analyzed by a laboratory approved by the State of Nevada and the cost of the analysis will be covered by the mining operation.

A permittee is required to perform the following sampling protocol in accordance with each specific requirement:

a. A representative composite sample must be generated from each cell and submitted semi-annually for TPH (Method 8015) analysis;

b. An initial representative sample must be collected of any material generated by the permittee from locations other than unforeseen spills and releases (e.g., maintenance building sumps, vehicular wash area sumps, oil/water separators, etc.) These samples must be analyzed in accordance with the TCLP (Method 1311). If the waste stream generation has not changed since the initial TCLP then a facility may submit documentation verifying this in lieu of additional TCLP analysis; and

c. Following completion of the bioremediation process a representative composite sample must be collected from material anticipated to be removed from the system and analyzed for TPH (Method 8015) prior to removal.

5. Reporting Requirements.

a. The permittee is required to submit semi-annual reports, on or before July 28 and January 28 of each year, to the Division. These semi-annual reports will contain the following information generated during the six months prior to these dates:

1. Results from representative composite sample taken in accordance with Permit Part 4.a and Permit Part 4.c;

2. Analytical results of material added to the system in accordance with Permit Part 4.b (e.g., materials generated from sumps in maintenance buildings, vehicular wash areas, and oil/water separators;

3. A record of the volume and origin of all Permitted Material added to

the system; and

4. A record of the volume of treated materials removed from the system and a description of their disposition.

b. In addition to the information required above, the report submitted on January 28 shall contain:

1. A graphical representation of the average temperatures and precipitation for each month of the year;

2. A summary of the volume and dates when additives were introduced to the system during the year; and

3. The total volume (in cubic yards) of material added to and removed from the system during the year.

6. As-built Report.

Within thirty (30) days after construction of a bioremediation cell, the permittee is required to submit to the Division as-built documents and a QC report demonstrating that the facility has been constructed in accordance with guidelines and specifications. For cells with a soil liner, the QC report must be prepared by a professional engineer registered in Nevada.

7. Renewal of Permit.

This permit is life of mine permit and is not required to be renewed on a scheduled basis. An annual review and service fee of two hundred dollars (\$200.00) is due on or before July 1 of each year.

8. Transfer of Permit.

A permittee may not transfer this permit to any other individual or company without written approval from the Division.